

I claim:

Device for injecting sublimable particles into a pressurized stream of gas comprising:

1. an endless rotational energy connecting element passing over a driven rotational transmission member and one or more idle rotational transmission members with a plurality of conveying members attached to said endless rotational energy connecting element that passes through a supply of sublimable particles conveying with it sublimable particles before passing through an airlock assembly, said airlock assembly comprised of a passage to receive pressurized gas at one end and discharge it mixed with sublimable particles at the opposite end and a second passage intersecting the first passage that said endless rotational energy connecting element passes through with a means to restrict gas from escaping where said endless rotational energy connecting element enters and exits said second passage
2. The device of claim 1 wherein said an endless rotational energy connecting element passing over a driven rotational transmission member and one or more idle rotational transmission members with a plurality of conveying members attached to said endless rotational energy connecting element is a driven endless conveyor.
3. The device of claim 2 wherein said driven endless conveyor is an adjustable speed cable type conveyor.
4. The device of claim 1 wherein said endless rotational energy connecting element is a cable.
5. The device of claim 1 wherein said means to restrict gas from escaping where said endless rotational energy connecting element enters and exits said second passage is a plurality of v-seals inside both ends of said second passage.
6. The device of claim 5 wherein said plurality of v-seals are made of PTFE.

A blast cleaning apparatus for use with sublimable media, a source of pressurized gas, and a nozzle, said blast cleaning apparatus comprising:

7. an air lock assembly comprised of a passage to receive pressurized gas at one end and to discharge it mixed with sublimable particles at the opposite end and a second passage intersecting the first that has an endless conveyor passing through it with a means to

restrict the leakage of gas past the points where said endless conveyor enters and exits said second passage,

said endless conveyor has a plurality of attached conveyor members passing over a driven sprocket and one or more idler sprockets that passes through a supply of sublimable particles conveying said sublimable particles into said air lock assembly.

8. The device of claim 7 wherein said means to restrict the leakage of gas past the points where said endless conveyor enters and exits said second passage is a plurality of v-seals inside both ends of said second passage.

9. The device of claim 8 wherein said plurality of v-seals are made of PTFE.

10. The device of claim 7 wherein said endless conveyor is an adjustable speed cable type conveyor with a plurality of disk shaped conveying members attached.

11. A method to inject sublimable particles into a pressurized stream of gas, comprising the steps of:

(a) providing a stream of pressurized gas,

(b) providing a gas passage,

(c) passing said stream of pressurized gas through said gas passage,

(d) providing a second passage that intersects said gas passage,

(e) providing an endless loop conveyor that passes through a supply of sublimable particles before passing through said second passage,

(f) providing a means to restrict the leakage of gas past the points where said endless loop conveyor enters and exits said second passage, and

(g) injecting said stream of pressurized gas with said sublimable particles with said endless loop conveyor,

whereby said stream of pressurized gas is injected with sublimable particles.